Investing WRS Assets
Current Topics

UW Madison Retirees Association
by Keith Bozarth
April 20, 2010
Core Fund 2009
Performance: 22.4%
Outperformance: 2.45%

Key Contributors to Outperformance

<table>
<thead>
<tr>
<th>Allocation Effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity and Credit</td>
<td>+0.82%</td>
</tr>
<tr>
<td>International Small Cap</td>
<td>+0.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Portfolio Contributors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Equity Group</td>
<td>+0.62%</td>
</tr>
<tr>
<td>Public Fixed Income Group</td>
<td>+0.84</td>
</tr>
<tr>
<td>Real Estate</td>
<td>-0.67</td>
</tr>
<tr>
<td>Private Equity Group</td>
<td>+0.22</td>
</tr>
<tr>
<td>Multi-Asset Strategies</td>
<td>+0.44</td>
</tr>
<tr>
<td>Other Effects</td>
<td>+0.08</td>
</tr>
</tbody>
</table>
## 2010 Investment Performance

### As of March 31, 2010*

<table>
<thead>
<tr>
<th></th>
<th>Calendar YTD</th>
<th>Five Years</th>
<th>Ten Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Fund</td>
<td>2.7%</td>
<td>5.0%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Benchmark</td>
<td>2.8%</td>
<td>4.8%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Variable Fund</td>
<td>4.8%</td>
<td>3.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Benchmark</td>
<td>4.6%</td>
<td>3.2%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

*Preliminary
Organizational Improvements

- “Prudent investor” standard adopted
- Increase in resources
- Improved monitoring of external managers
- Global equity portfolios
- Internal Russell 1000 Index portfolio
Organizational Improvements (cont)

- Set “active” risk corridor
- Created currency overlay
- Created Multi-Asset Strategies Portfolio
- Modern trading systems and data warehouse
- Extensive operations review
2010 Asset Allocation Objective

Reduce Core Fund risk and improve performance in down markets

- Diversify risk away from equities
- Raise fixed income for increased contribution to return
Expressing Risk Exposure

2009 Core Fund Investment Allocation

- Private & Public Equities
- Fixed Income

2009 Contribution to Risk

- Real Estate & Private Debt
- Multi Asset
Equity Risk Premium*

**Good News:** Since 1926 equity returns were healthy

**Bad News:** Long periods of disappointing returns

<table>
<thead>
<tr>
<th>Period</th>
<th>Excess Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926 – 1942 (16 years)</td>
<td>1.0%</td>
</tr>
<tr>
<td>1965 – 1982 (17 years)</td>
<td>0.5%</td>
</tr>
<tr>
<td>1999 – 2009 (11 years)</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>

* Equity risk premium is the stock return minus the one-month Treasury bill rate. It represents the difference in return from stocks compared to a low-risk investment.
Implementing 2010 Allocation

- Equity allocation cut 2%
- Multi-asset increased 2%
- SWIB considers using new strategies
  - Inflation protection
  - More diversification
    - Leverage
    - Hedge Funds
- Trustees must approve implementation
Reducing Fund Volatility

The goal is to stabilize the effects of returns on the WRS

- Slight reduction in performance in times of strong stock markets
- Better protection against worst outcomes
Next Steps

Consider “pilot” programs

Consider market conditions

Incremental implementation
Leverage Comparisons

- **Lehman Bros:** 44 times
- **Homebuyer:** 5 times
- **SWIB:** 1.04 times

^Leverage ratio prior to bankruptcy in 2008
*Homebuyer is based on 20% down payment
Hedge Fund Universe

- 6,000 hedge funds
- About 500 are institutional quality
- SWIB will consider a “select” group

6,000 hedge funds worldwide
$1.4 trillion in assets

500 top rated hedge funds
$700 billion in assets

60 "Select"
$200 billion in assets
Points to Remember

- Purpose of proposed allocation changes
  - Reduce risk associated with equities
  - Provide better protection in negative markets
- No borrowed cash
- Trustees must approve methods used
- Changes will be slow and deliberative